

BEFORE THE  
POLLUTION CONTROL HEARINGS BOARD  
STATE OF WASHINGTON

1 IN THE MATTER OF )  
2 BOISE CASCADE CORPORATION, )  
3 Appellant, )  
4 v. )  
5 STATE OF WASHINGTON, )  
6 DEPARTMENT OF ECOLOGY, )  
7 Respondent. )

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PCHB No. 714

FINAL FINDINGS OF FACT,  
CONCLUSIONS AND ORDER

8 This appeal by Boise Cascade Corporation (herein Appellant) came on  
9 for an informal hearing at the office of the Board in Lacey, Washington  
10 on January 14, 1975. Board members W. A. Gissberg (presiding), Chris  
11 Smith, and Walt Woodward heard the appeal. Appellant was represented by  
12 its attorney, Graham H. Fernald; Respondent was represented by Joseph J.  
13 McGoran, Assistant Attorney General.

14 The Board having heard the evidence and oral argument, and seen  
15 exhibits and stipulations of fact, and having considered Respondent's  
16 exceptions and as a result thereof having added to its proposed Finding  
17 of Fact XVIII, and being fully advised, now makes and enters the  
18 following

EXHBIT A

1 FINDINGS OF FACT

2 I.

3 The Appellant is a corporation authorized to do business in the  
4 State of Washington, with its principal place of business in this  
5 state, insofar as applicable to this appeal, at Kettle Falls, Washing-  
6 ton.

7  
8 II.

9 The Respondent has adopted emission control regulations limiting  
10 the opacity of visible emissions, WAC 18-04-040, and the discharge of  
11 particulate from combustion and incineration sources, WAC 18-04-050.  
12 These regulations require generally that, effective July 1, 1975,  
13 visible emissions shall not exceed 0.10 grains per standard cubic  
14 foot. Appellant's dryer is required to comply with these regulations  
15 and to register with the Respondent pursuant to WAC 18-04-100(15).  
16

17 III.

18 Appellant owns and operates a plywood plant at Kettle Falls. The  
19 plywood plant has been operating for a number of years, and consists  
20 of the following equipment: steam vats, veneer lathe, clipper, veneer  
21 dryer, spreaders, a press charger, a hot press, a press unloader, trim  
22 saws, a sorting system and a strapping machine.  
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IV.

Plywood consists of thin bands of wood veneer glued together with an adhesive, and with grain orientation usually in alternating directions. The basic steps in manufacturing plywood are: steaming and peeling the logs or veneer blocks, trimming and drying the veneer, and gluing the veneer.

V.

The veneer blocks are placed in steam vats where the wood is heated and saturated with moisture, to soften or plasticize the wood so that peeling can be accomplished without breaking or shattering the wood. After peeling, the veneer sheets have defects cut out of them and are cut to size by clippers. The veneer is then fed into veneer dryers where the moisture content of the veneer is reduced. Drying is a technological necessity in the manufacture of plywood for three reasons: (1) the end use of the plywood dictates that it be dry, (2) it would not be practical to glue veneer layers together until the volumetric shrinkage that occurs in drying is accomplished, and (3) with wet veneer it would not be possible to use a steam press for setting the thermo-activated adhesive.

VI.

To effect drying, the veneer is fed into dryers in multiple layers and is carried on a series of power-driven rollers that move the veneer sheets in a longitudinal direction. High temperature air

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1 is passed over the veneer, and this air picks up moisture and water-  
2 soluble extractives in the wood.

3  
4 VII.

5 Because of the temperatures and air velocities involved, fine  
6 particles of wood, unburned hydrocarbons and particulate are also  
7 picked up and carried in the air stream, which is vented to the atmo-  
8 sphere, and appears as the characteristic "blue haze" of the veneer  
9 dryer. It is these hydrocarbons and particulate emissions which cause  
10 the dryer to exceed permissible particulate emission levels estab-  
11 lished by the Respondent. "But for" these emission requirements,  
12 Appellant's dryer with proper maintenance would have operated satis-  
13 factorily indefinitely.

14  
15 VIII.

16 There are two ways by which Respondent's emission standards could  
17 be met by Appellant: by scrubbing or by incineration. The incinerator  
18 method could be accomplished by either of two methods: Appellant's  
19 present burners, fired by natural gas, could be supplemented by an  
20 afterburner; or replace the present natural gas burners with wood  
21 burners while adding duct work to the wood burners thereby allowing a  
22 reburning of previously emitted hydrocarbons and particulates.

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IX.

The gas fired afterburner alternative was rejected without capital investment cost figures being obtained thereon because Appellant did not know as to its technological capability of meeting emission requirements. Appellant's supplier of equipment would not guarantee that the gas-fired afterburner alternative would achieve compliance with Respondent's regulations and it is "doubtful" whether such alternative would achieve compliance therewith.

X.

Appellant's choices were therefore narrowed to the scrubber method or incineration with wood burners. Either method is suitable, reasonably adequate and meets the intent and purpose of Chapter 70.94 RCW. The scrubber system would have cost somewhere between \$175,000 to \$200,000 while the wood-burners system require a greater expenditure, i.e., \$262,500.

XI.

Appellant chose the more expensive method. It chose to replace the present gas-fired burners with wood-fired burners and reburners. Appellant's present gas-fired burners which were installed in 1966, are in good repair and could be used indefinitely with good maintenance, will be left intact, and Appellant has no plans to dispose of them.

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XII.

Appellant's opted wood burners replacement method will allow a 60% reduction in the need for the purchase of gas to operate the veneer dryer. Moreover, this replaced fuel source will now be fired from scraps from the plywood plant and wood wastes from other sources at the plant.

XIII.

The most expensive capital outlay method was selected primarily for economic reasons, not primarily for pollution control, i.e., the wood burner systems allowed a long-run economic return to Appellant, rather than no economic return from the scrubber.

XIV.

Another reason in choosing the wood burner method was because of a "potential public relations" problems with the use of the scrubber method. The latter method would create a steam plume which, while not in conflict with the Department of Ecology regulations, would be observed by the local citizens.

XV.

The chosen method is primarily fired by a product under Boise Cascade's control rather than an outside source of energy which may not be reliable. Prior to Appellant's decision to opt for the wood-

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1 burner systems, Appellant had suffered intermittent stoppages of  
2 natural gas from its suppliers.

3  
4 XVI.

5 The facts considered in choosing the wood-burner systems over the  
6 scrubber system leave the Pollution Control Hearings Board in doubt as  
7 to whether the selected choice will be either operated or intended to  
8 be operated primarily for pollution control.

9  
10 XVII.

11 By using the wood-burner systems, the straight trade-off of the  
12 primary wood burners for the gas burners will not result in measurably  
13 less pollutants. The addition of the duct work thereby allowing for a  
14 reburning of hydrocarbons and particulates is necessary before the  
15 veneer dryer will be able to comply with Department of Ecology air  
16 emission regulations.

17  
18 XVIII.

19 Although the Department of Ecology completely denied approval  
20 of any portion of the veneer dryer, it states that upon reconsidera-  
21 tion of the component costs breakdown, it will give partial approval.  
22 It is the Department of Ecology's position that only that portion of  
23 the veneer dryer which is a "pure pollution control facility", i.e.,  
24 the duct work constituting the reburning unit, should be approved.  
25 The Department of Ecology maintains that no tax credit/exemption

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1 should be given for the replacement of the gas burners with the wood  
2 burners as both are necessary to the manufacture of plywood as that  
3 term is used in WAC 173-24-100. Appellant could not operate the veneer  
4 dryer without burners of some type.

5 XIX.

6 The Department of Ecology would have approved the cost of the  
7 scrubber, the "black box" technology had that alternative been chosen  
8 by Appellants.

9 Based upon the foregoing Findings of Fact, the Board makes the  
10 following

11 CONCLUSIONS OF LAW

12 I.

13 Appellant's modified veneer dryer is suitable, reasonably adequate  
14 and meets the intent and purposes of chapter 70.94 RCW.

15 II.

16 Appellant's modified veneer dryer meets the design test of  
17 RCW 82.34.030.

18 III.

19 Tax exemption/credit statutes are to be strictly construed against  
20 the claimed exemption. Strictly construing that part of RCW 82.34.030  
21 which states:

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1 "Such approval shall be given when . . . the  
2 facility is . . . operated or is intended to be  
3 operated primarily for the control, capture and  
4 removal of pollutants. . . ."

5 means that the operational test is not satisfied. Doubt and ambiguity  
6 exists, therefore the modified veneer dryer is not operated nor  
7 intended to be operated primarily for air pollution control purposes.

8 IV.

9 RCW 82.34.010(1)'s definition of "facility" to include "any part  
10 or accessories thereof" allows the giving of a partial approval on  
11 Chapter 82.34 RCW tax credit/exemption applications.

12 V.

13 Installation and operation of the wood-burner systems is not  
14 necessary for the manufacture of products as that term is used in  
15 WAC 173-24-030 and 100 as Appellant could continue indefinitely to  
16 operate the veneer dryer in gas-fired burners, but for the Department  
17 of Ecology's regulations.

18 VI.

19 Chapter 82.34 RCW does not prohibit partial approval of a process  
20 change. That portion of the process change, i.e., the wood-burner  
21 systems, which represents the cost of the alternative "black box"  
22 scrubber, is operated or intended to be operated primarily for the  
23 purposes of air pollution control.

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VII.

Only that portion of the process change which represents the cost of the scrubber qualifies for the tax exemption and credit provided by chapter 82.34 RCW.

Therefore, the Pollution Control Hearings Board issues this

ORDER

The Department of Ecology's denial of full approval for a certificate authorizing tax exemption and credit provided by chapter 82.34 RCW with respect to the modified veneer dryer at Appellant's plywood plant at Kettle Falls is affirmed.

This matter is further remanded to the Department of Ecology for its determination of the level of partial approval. In making that redetermination, Respondent should approve that portion of the cost of the wood-burner systems, up to 100 percent, which equals the cost of the "black box" technology, scrubber system.

DONE at Lacey, Washington this first day of April, 1975.

POLLUTION CONTROL HEARINGS BOARD

W. A. GISSBERG  
W. A. GISSBERG, Member

Walt Woodward  
WALT WOODWARD, Member

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